Abstract

In a method of separating acoustic signals from a plurality of sound sources comprising the following
5   steps:
- disposing two microphones (MIK1, MIK2) at a predefined distance (d) from one another;
- picking up the acoustic signals with both microphones (MIK1, MIK2) and generating
10   associated microphone signals (m1, m2); and
- separating the acoustic signal of one of the sound sources (S1) from the acoustic signals of the other sound sources (S2) on the basis of the microphone output signals (m1, m2),
15   the proposed separation step comprises the following steps:
- applying a Fourier transform to the microphone output signals in order to determine their frequency spectra (M1, M2);
20   - determining the phase difference (φ) between the two microphone output signals (m1, m2) for every frequency component of their frequency spectra (M1, M2);
- determining the angle of incidence (ϑ) of every
25   acoustic signal allocated to a frequency of the frequency spectra (M1, M2) on the basis of the relative phase angle (φ) and the frequency;
- generating a signal spectrum (S) of a signal to be output by correlating one of the two frequency
30   spectra (M1, M2) with a filter function (F_{ϑ_0}) which is selected so that acoustic signals from an area (γ_{3db}) around a preferred angle of incidence (ϑ_0) are amplified relative to acoustic

signals from outside this area (γ_{3db}); and

- applying an inverse Fourier transform to the resultant signal spectrum.

5   (Fig. 1)